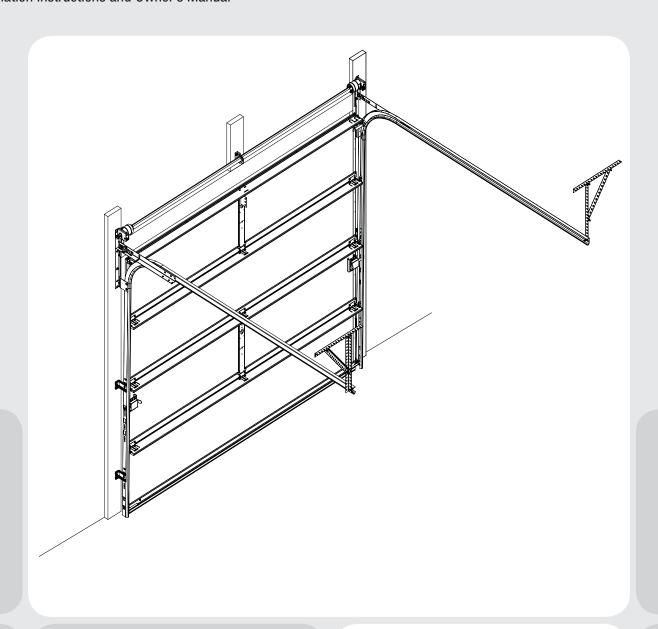


9300 Series

TorqueMaster® Plus

Installation Instructions and Owner's Manual



IMPORTANT NOTICE!

Read these instructions carefully before attempting installation. If in question about any of the procedures, do not perform the work. Instead, have a trained door systems technician do the installation or repairs.

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Definition of key words used in this manual: MARNING

INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN SEVERE OR FATAL INJURY.

CAUTION: PROPERTY DAMAGE OR INJURY CAN RESULT FROM FAILURE TO FOLLOW INSTRUCTIONS.

IMPORTANT: REQUIRED STEP FOR SAFE AND PROPER DOOR OPERATION.

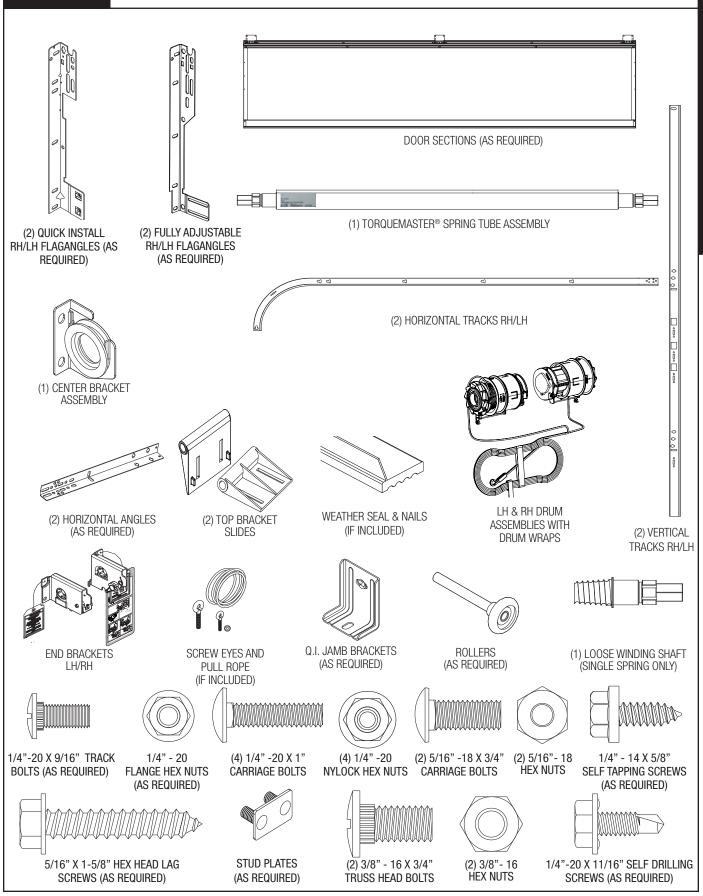
NOTE: Information assuring proper installation of the door.

⚠ WARNING

TO AVOID POSSIBLE INJURY, READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING INSTALLATION. IF IN QUESTION ABOUT ANY OF THE PROCEDURES, DO NOT PERFORM THE WORK. INSTEAD, HAVE A TRAINED DOOR SYSTEMS TECHNICIAN DO THE INSTALLATION OR REPAIRS.

- 1. READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.
- 2. Wear protective gloves during installation to avoid possible cuts from sharp metal edges.
- 3. It is always recommended to wear eye protection when using tools, otherwise eye injury could result.
- 4. Avoid installing your new door on windy days. Door could fall during the installation causing severe or fatal injury.
- 5. Doors 12'- 0" wide and wider should be installed by two persons, to avoid possible injury.
- 6. Operate door ONLY when it is properly adjusted and free from obstructions.
- If a door becomes hard to operate, inoperative or is damaged, immediately have necessary adjustments and/or repairs made by a trained door system technician using proper tools and instructions.
- 8. DO NOT stand or walk under a moving door, or permit anybody to stand or walk under an electrically operated door.
- DO NOT place fingers or hands into open section joints when closing a door. Use lift handles/gripping points when operating door manually.
- DO NOT permit children to operate garage door or door controls. Severe or fatal injury could result, should the child become entrapped between the door and the floor.
- 11. Due to constant extreme spring tension, DO NOT attempt any adjustment, repair or alteration to any part of the door, especially to springs, spring brackets, bottom corner brackets, red colored fasteners, cables or supports. To avoid possible severe or fatal injury, have any such work performed by a trained door systems technician using proper tools and instructions.
- 12. On electrically operated doors, pull down ropes must be removed and locks must be removed or made inoperative in the open (unlocked) position.
- Top section of door may need to be reinforced when attaching an electric opener. Check door and/or opener manufacturer's instructions.
- 14. VISUALLY inspect door and hardware monthly for worn and or broken parts. Check to ensure door operates freely.
- 15. Test electric opener's safety features monthly, following opener manufacturer's instructions.
- NEVER hang tools, bicycles, hoses, clothing or anything else from horizontal tracks. Track systems are not intended or designed to support extra weight.
- 17. Avoid installing your door in close proximity to any heat source that may exceed 200° F. Failure to due so, may cause door sections to blister and/or warp.

After installation is complete, fasten this manual near garage door.



Door Section Identification

All hinges are factory attached at the top of each section (except the top section). See illustrations to the right.

NOTE: The side view illustration shows the roller carrier profile at the top of each section, and can be used in conjunction with identifying each section.

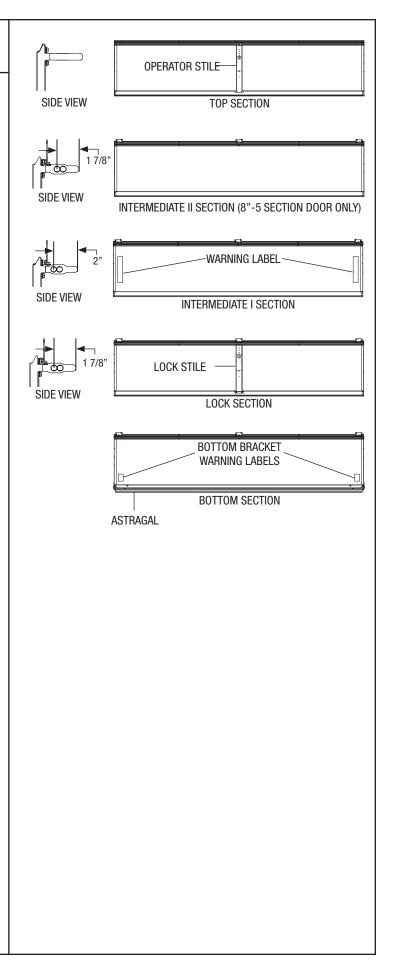
The <u>BOTTOM SECTION</u> can be identified by the bottom astragal and bottom bracket warning labels.

The $\underline{\mathsf{LOCK}}$ SECTION can be identified by the lock stile /or side view.

The <u>INTERMEDIATE I SECTION</u> can be identified by the warning label on either the right or left hand side of the section /or side view.

The <u>INTERMEDIATE II SECTION</u> can be identified by the side view (Used ONLY with 5 section doors).

The <u>TOP SECTION</u> can be identified by no preinstalled end or center hinges, and a factory attached operator stile.



STEP LADDER

Tools Required 1/8". 3/16" DRILL BITS POWER DRILL RATCHET WRENCH PLIERS/WIRE CUTTERS TAPE MEASURE **NEEDLE NOSE PLIERS** PHILLIPS HEAD SCREWDRIVER FLAT TIP SCREWDRIVER **PENCIL GLOVES** 7/16", 1/2", 9/16" 3/8", 7/16", 1/2", 9/16" 7/16" SOCKET DRIVER SAFETY GLASSES **SOCKETS WRENCHES**

Removing An Existing Door

VICE GRIPS

IMPORTANT: COUNTERBALANCE SPRING TENSION MUST ALWAYS BE RELEASED BEFORE ANY ATTEMPT IS MADE TO START REMOVING AN EXISTING DOOR.

VICE CLAMPS

SAW HORSES (PAIR)

△ WARNING

HAMMER

A POWERFUL SPRING RELEASING ITS ENERGY SUDDENLY CAN CAUSE SEVERE OR FATAL INJURY. TO AVOID INJURY HAVE A TRAINED DOOR SYSTEMS TECHNICIAN, USING PROPER TOOLS AND INSTRUCTIONS, RELEASE THE SPRING TENSION.

For detailed information see supplemental instructions "Removing an Existing Door/Preparing the Opening". These instructions are available at no charge from Wayne-Dalton Corp., P.O. Box 67, Mt. Hope, OH 44660, or at www.wayne-dalton.com.

Preparing the Opening

Tools Needed: Recommended tools from page 5

△ WARNING

FAILURE TO SECURELY ATTACH A SUITABLE MOUNTING PAD TO STRUCTURALLY SOUND FRAMING COULD CAUSE SPRINGS TO VIOLENTLY PULL MOUNTING PAD FROM WALL, RESULTING IN SEVERE OR FATAL INJURY.

If you just removed your existing door or you are installing a new door, complete all steps in PREPARING THE OPENING.

To ensure secure mounting of track brackets, side and center brackets, or steel angles to new or retro-fit construction, it is recommended to follow the procedures outlined in DASMA Technical Data Sheets #156, #161 and #164 at www.dasma.com

The inside perimeter of your garage door opening should be framed with wood jamb and header material. The jambs and header must be securely fastened to sound framing members. It is recommended that $2" \times 6"$ lumber be used. The jambs must be plumb and the header level. The jambs should extend a minimum of 12" (305 mm) above the top of the opening for TorqueMaster $^{\textcircled{\$}}$ counterbalance systems. For low headroom applications, the jambs should extend to the ceiling height. Minimum side clearance required, from the opening to the wall, is 3-1/2" (89 mm).

IMPORTANT: CLOSELY INSPECT JAMBS, HEADER AND MOUNTING SURFACE. ANY WOOD FOUND NOT TO BE SOUND, MUST BE REPLACED.

For TorqueMaster $^{\textcircled{e}}$ counterbalance systems, a suitable mounting surface (2" x 6") must be firmly attached to the wall, above the header at the center of the opening.

NOTE: Drill 3/16" pilot holes in the mounting surface to avoid splitting the lumber. Do not attach the mounting surface with nails.

Weather Seal (May Not Be Included):

Cut the weather seal (if necessary) to fit the header and jambs.

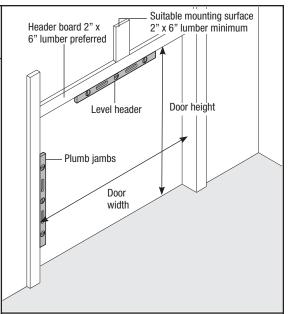
NOTE: If nailing product at 40°F or below, pre-drilling is required.

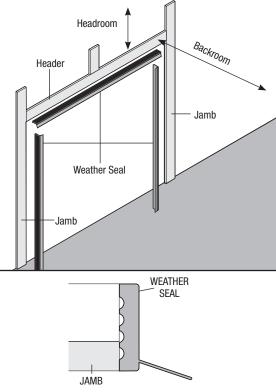
Align the header seal with the inside edge of the header and temporarily secure it to the header with equally spaced nails. Next, fit the jamb seals up tight against the header seal and flush with the inside edge of the jamb. Temporarily secure the jamb seals with equally spaced nails. This will keep the bottom section from falling out of the opening during installation. Space nails approximately 12" apart.

NOTE: Do not permanently attach weather seal to the jamb at this time.

HEADROOM REQUIREMENT: Headroom is defined as the space needed above the top of the door for tracks, springs, etc. to allow the door to open properly. If the door is to be motor operated, 2-1/2" (64 mm) of additional headroom is required.

BACKROOM REQUIREMENT: Backroom is defined as the distance needed from the opening back into the garage to allow the door to open fully.





TRACK TYPE	TorqueMaster®
12"	11"
15"	13-1/2"

QUICK INSTALL

HEADROOM REQUIREMENT

DOOR HEIGHT	TRACK	MANUAL Lift	MOTOR OPERATED	
6'5"-7'0"	12", 15" Radius	98"	125"	
8'0"	12", 15" Radius	110"	137"	
DACKDOOM DECLUDEMENT				

BACKROOM REQUIREMENT

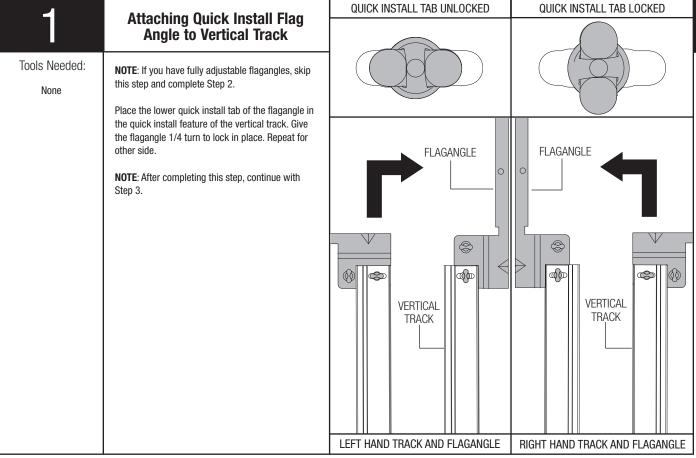
Installation

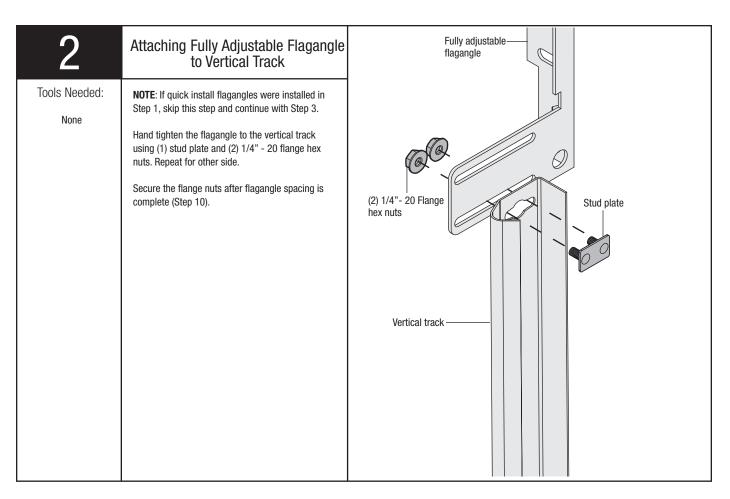
Begin the installation of the door by checking the opening. It must be the same size as the door. Vertical jambs must be plumb and header must be level. Side clearance, from edge of door to wall, must be a minimum of 3-1/2" (89mm) on each side.

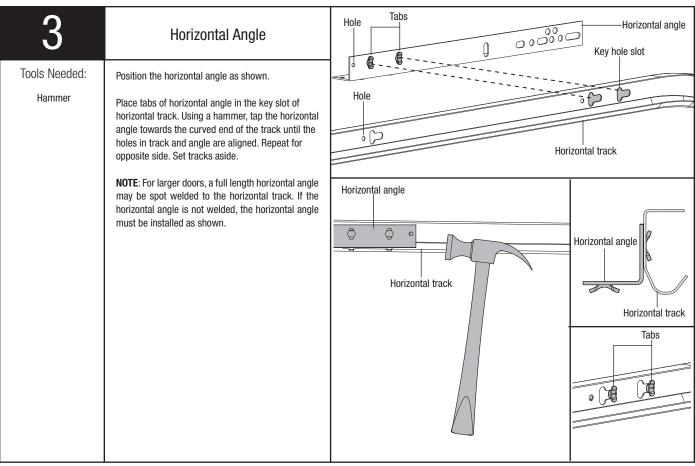
IMPORTANT: STAINLESS STEEL OR PT 2000 COATED LAG SCREWS (NOT SUPPLIED) <u>MUST</u> BE USED WHEN INSTALLING CENTER BEARING BRACKETS, END BRACKETS, JAMB BRACKETS, OPERATOR MOUNTING/SUPPORT BRACKETS AND DISCONNECT BRACKETS ON TREATED LUMBER (PRESERVATIVE-TREATED). STAINLESS STEEL OR PT 2000 COATED LAG SCREWS ARE <u>NOT</u> NECESSARY WHEN INSTALLING PRODUCTS ON UNTREATED LUMBER.

IMPORTANT: WHEN INSTALLING 5/16" DIAMETER LAG SCREWS USING AN ELECTRIC DRILL/DRIVER, THE DRILL/DRIVER'S CLUTCH MUST BE SET TO DELIVER NO MORE THAN 200 IN. LBS. OF TORQUE. FASTENER FAILURE COULD OCCUR AT A HIGHER SETTING.

NOTE: It is recommended that 5/16" lag screws be pilot drilled using a 3/16" drill bit, prior to fastening.



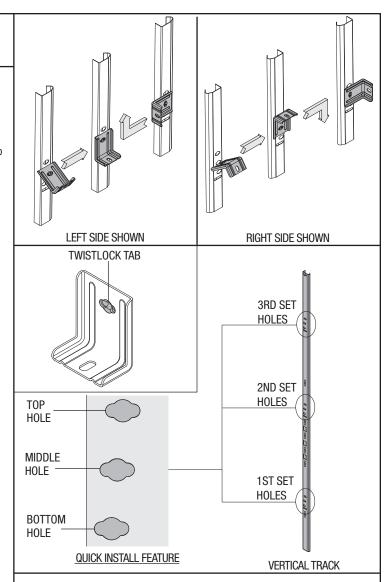




Installing Q.I. Jamb Brackets

Tools Needed: Tape Measure Measure the length of the vertical tracks. Using the jamb bracket schedule, determine the placement of the jamb brackets for your door height and track type.

To install the jamb brackets, align the twistlock tab on the quick install jamb bracket with the quick install feature in the track and turn the bracket perpendicular to the track so the mounting flange is toward the back (flat) leg of the track.



JAMB BRACKET SCHEDULE							
DOOR	DOOR TRACK HEIGHT LENGTH	1ST SET		2ND SET		3RD SET	
HEIGHT	LENGTH	JAMB BKT	POSITION	JAMB BKT	POSITION	JAMB BKT	POSITION
6'5"	69" (1753 mm)	QIJB - 3	воттом	QIJB - 6	MIDDLE	NOT APP	LICABLE
7'0"	76" (1930 mm)	QIJB - 3	воттом	QIJB - 7	TOP	NOT APPLICABLE	
8'0" 4 SECTIONS	88" (2235 mm)	QIJB - 3	MIDDLE	QIJB - 7	TOP	QIJB - 8	MIDDLE
8'0" 5 SECTIONS	88" (2235 mm)	QIJB - 3	воттом	QIJB - 7	TOP	QIJB - 8	ТОР

Drums

Tools Needed:

IMPORTANT: RIGHT AND LEFT HAND IS ALWAYS DETERMINED FROM INSIDE THE BUILDING LOOKING OUT.

NOTE: For door section identification see page 4.

TorqueMaster® drums are marked right and left hand. Uncoil the counterbalance cables and make sure you place the right hand cable loop on the right hand milford pin and place the left hand cable loop on the left hand milford pin. Check to ensure the cable loop fits tightly over the milford pin.

⚠ WARNING

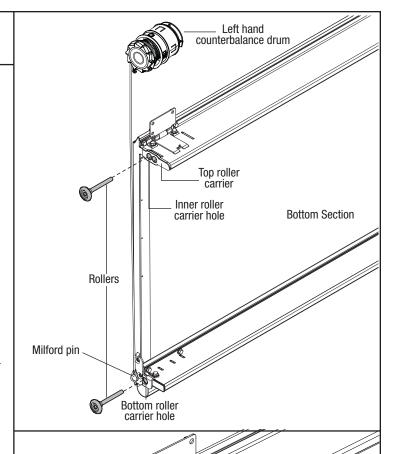
Failure to ensure tight fit of cable loop over milford pin could result in cable coming off the pin and allowing door to fall, possibly resulting in severe or fatal injury.

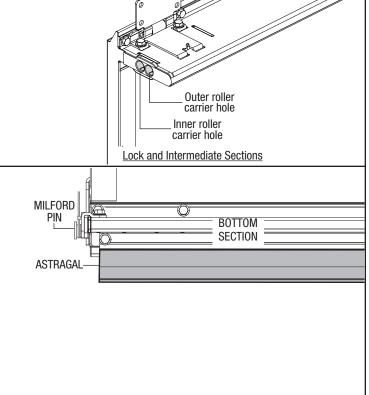
Bottom section: Insert roller into bottom roller carrier hole and insert another roller into the inner roller carrier hole, located at the top of the bottom section.

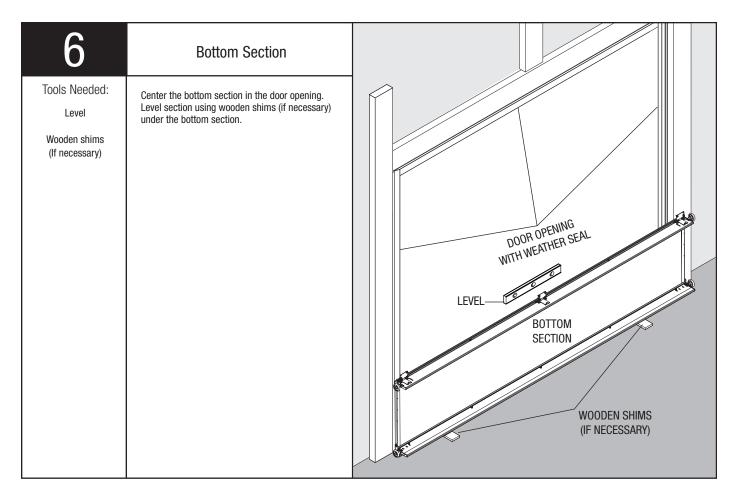
Lock section: Insert roller into the inner roller carrier hole.

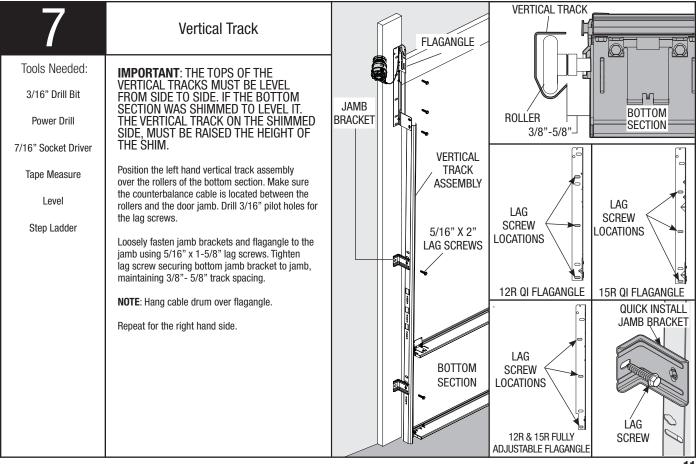
Intermediate section I: Insert roller into the outer roller carrier hole.

Intermediate section II (5 section- 8' Height only): Insert roller into the Outer roller carrier hole.

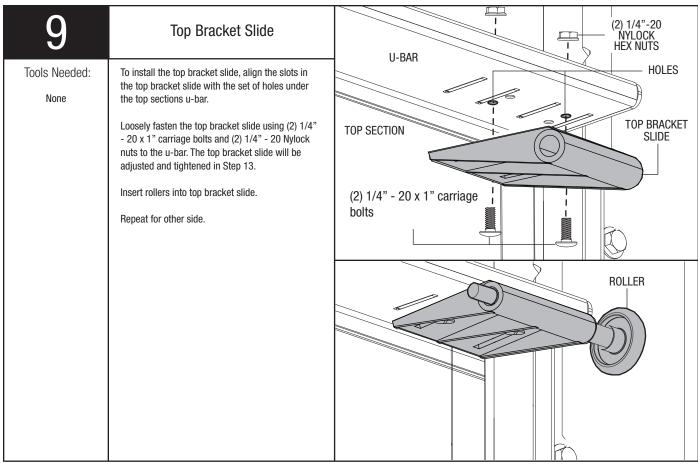








Stacking Sections Tools Needed: NOTE: For door section identification see page 4. NOTE: Make sure hinge leafs are flipped down, Power Drill L_OCK when stacking another section on top. SECTION 7/16" Socket Driver NOTE: When securing hinge leaf to the section, install the uppermost fastener first. With assistance, lift second section and guide rollers into the vertical tracks. Keep sections aligned and fasten center hinges first, end hinges last, to connect the sections using (2) 1/4" -14 x 5/8" self tapping screws. Repeat for other section(s) except top section. IMPORTANT: PUSH & HOLD THE HINGE LEAFS AGAINST SECTION WHILE SECURING WITH (2) 1/4" -14 x 5/8" SELF TAPPING SCREWS. END AND INTERMEDIATE HINGES HAVE (2) **UPPERMOST UPPERMOST** HINGE SCREWS. **HOLE** LEAF **NOTE**: Install lock at this time (sold separately) see Side Lock installation instructions on page 25. (2)1/4" - 14 X 5/8 1/4" - 14 X 5/8" SELF TAPPING SCREWS SELF TAPPING SCREWS INTERMEDIATE HINGES **END HINGES**



Top Section

Tools Needed: Hammer

Nail

Tape Measure

Step Ladder

Place the top section in the opening and vertically align with lower sections.

Temporarily secure the top section by driving a nail in the header near the center of the door and bending it over the top section.

Now flip up hinge leaf against section, fastening center hinges first, and end hinges last. (Refer to Step 8).

When installing a door with Torquemaster® Plus counterbalance system, vertical track alignment is critical.

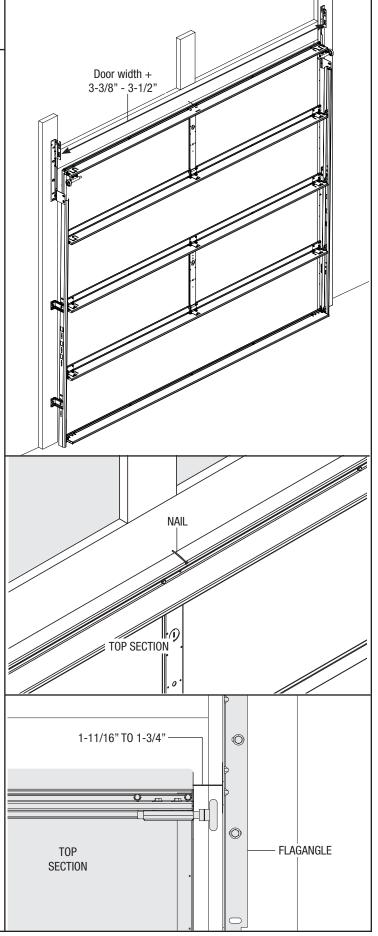
Position flagangle between 1-11/16" (43 mm) to 1-3/4" (44 mm) from the edge of the door. Tighten the bottom lag screw. Flagangles must be parallel to the door sections.

Repeat for opposite side.

IMPORTANT: THE DIMENSION BETWEEN THE FLAGANGLES MUST BE DOOR WIDTH PLUS 3-3/8" (86 MM) TO 3-1/2" (89 MM) FOR SMOOTH, SAFE DOOR OPERATION.

Now complete the vertical track installation by securing the center jamb bracket (s), flagangle, and connection of the vertical track/ flagangle.

Repeat for opposite side.



Attaching Horizontal Track to Quick Install Flagangle

Tools Needed:

9/16" Socket

Ratchet Wrench

9/16" Wrench

Level

Step Ladder

NOTE: If you have fully adjustable flagangle, skip this step and complete Step 12.

To install horizontal track, place the curved end over the top roller. Align key slot of the horizontal track with the quick install tab of the flagangle. Push curved portion of horizontal track down to lock in place.

Level the horizontal track assembly and bolt the horizontal angle to the slot in the flagangle using (1) 3/8" - $16 \times 3/4$ " truss head bolt and (1) 3/8" - 16 hex nut. Repeat for other side.

NOTE: If an idrive® opener will be installed, position horizontal tracks slightly above level.

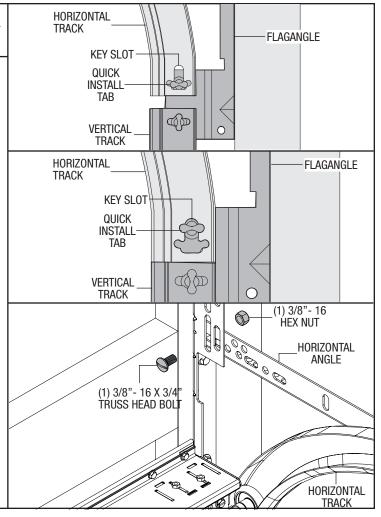
Remove the nail that was temporarily holding the top section in place, installed in Step 10.

△ WARNING

DO NOT RAISE DOOR UNTIL HORIZONTAL TRACKS ARE SE-CURED AT REAR, AS OUTLINED IN STEP 24, OR DOOR COULD FALL FROM OVERHEAD POSITION CAUSING SEVERE OR FATAL INJURY.

IMPORTANT: FAILURE TO REMOVE NAIL BEFORE ATTEMPTING TO RAISE DOOR COULD CAUSE PERMANENT DAMAGE TO TOP SECTION.

NOTE: After completing this step, continue with step 13.



12

Attaching Horizontal Track to Fully Adjustable Flagangle

Tools Needed:

9/16" Socket

7/16" Socket

Ratchet Wrench

9/16" Wrench

Level

Step Ladder

NOTE: If quick install flagangles were installed in Step 11, skip this step and continue with Step 13.

To install horizontal track, place the curved end over the top roller. Align the bottom of the horizontal track with the vertical track. Hand tighten the horizontal track to the flagangle with a stud plate and (2) 1/4"-20 flange hex nuts.

Level the horizontal track assembly and bolt the horizontal angle to the slot in the flagangle using (1) 3/8" - 16 x 3/4" truss head bolt and (1) 3/8" - 16 hex nut. Repeat for other side

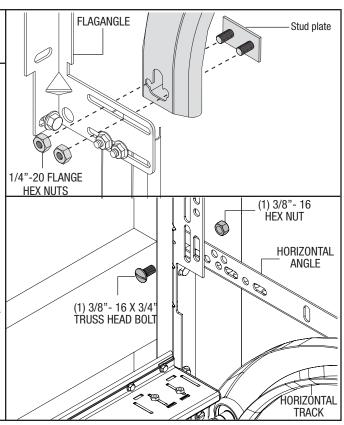
NOTE: If an idrive® opener will be installed, position horizontal tracks slightly above level.

Remove the nail that was temporarily holding the top section in place, installed in Step 10.

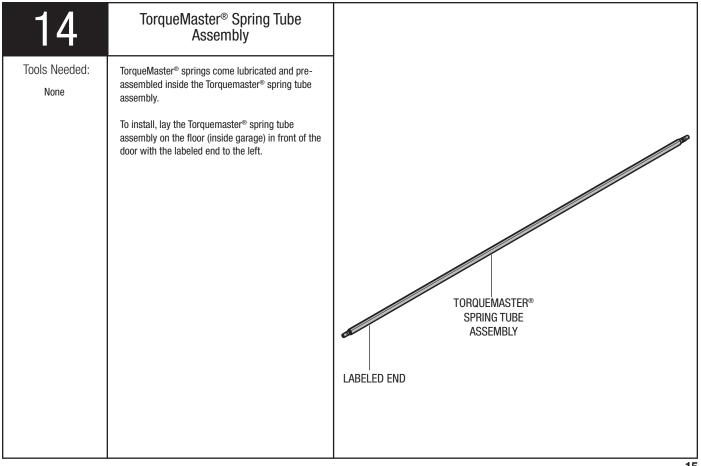
△ WARNING

DO NOT RAISE DOOR UNTIL HORIZONTAL TRACKS ARE SECURED AT REAR, AS OUTLINED IN STEP 24, OR DOOR COULD FALL FROM OVERHEAD POSITION CAUSING SEVERE OR FATAL INJURY.

IMPORTANT: FAILURE TO REMOVE NAIL BEFORE ATTEMPTING TO RAISE DOOR COULD CAUSE PERMANENT DAMAGE TO TOP SECTION.



Adjusting Top Bracket Slide Tools Needed: With horizontal tracks installed, you can now (2) CARRIAGE BOLTS AND NUTS adjust the top bracket slides. HORIZONTAL TRACK 7/16" Wrench Vertically align the top section of the door with Step Ladder the lower sections. Once aligned, position the top bracket slide, out against the horizontal track. **ROLLER** Maintaining the top bracket slide's position, tighten the (2) 1/4" - 20 x 1" carriage bolts and (2) TOP TOP BRACKET 1/4" - 20 nylock nuts. SECTION SLIDE T_OP T_OP **SECTION** SECTION INT. INT. **SECTION SECTION** CORRECT **INCORRECT**



Center Bracket Assembly

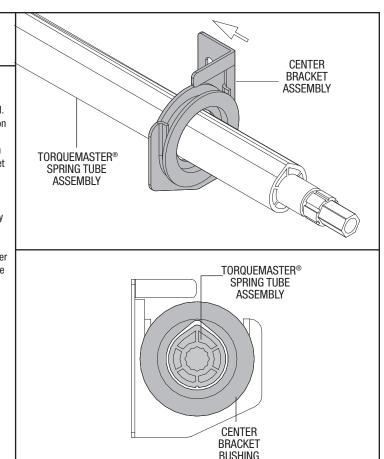
Tools Needed:

None

NOTE: If you are installing the <code>idrive®</code> opener with your garage door, skip this step and go to your <code>idrive®</code> Installation Instructions and Owner's Manual. After completing steps 1-13 of your <code>idrive</code> Installation Instructions and Owner's Manual, rear supports <code>NOTE</code>: If you are not installing the <code>idrive®</code> opener on your garage door, you must install the center bracket bushing assembly. Follow these instructions for non-<code>idrive®</code> operated garage doors.

Being cam shaped the center bracket assembly only fits one way.

Slide the center bracket assembly towards the center of the TorqueMaster® spring tube assembly, from the right side as shown.



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Cable Drums

Tools Needed:

Tape Measure

Step Ladder

Shake the TorqueMaster® spring tube assembly gently to extend the winding shafts out about 5" on each side. For single spring applications, there will be no left hand spring in the TorqueMaster® spring tube assembly.

Lift the TorqueMaster® spring tube assembly and rest it on the top of the flagangles.

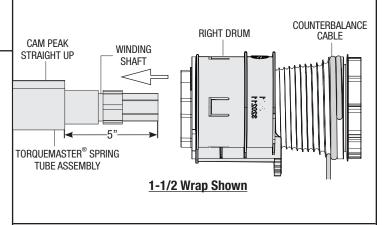
NOTE: Cable drums are marked right and left hand Cable drums and TorqueMaster® spring tube assembly are cam shaped to fit together only one way.

Starting on the right hand side, slide the drum wrap over to access the counterbalance cable. Now, prewrap the right hand cable drum with the counter balance cable 1-1/2 wraps as shown.

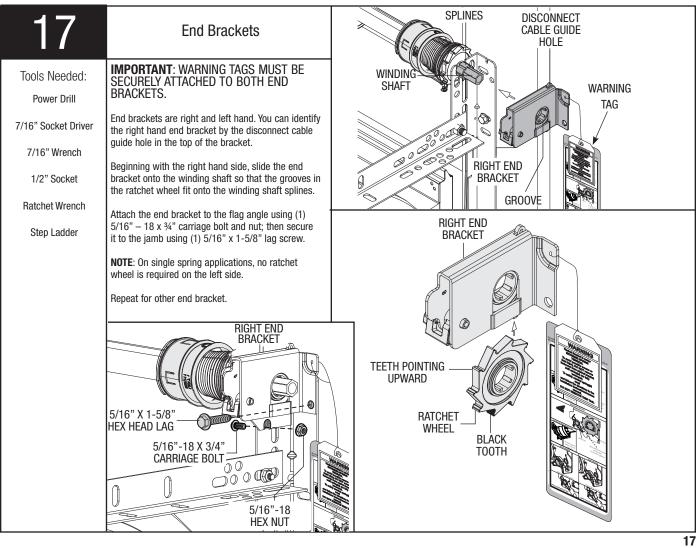
Position the Torquemaster® spring tube assembly so the cam peak is pointing straight up. Slide cable drum over the winding shaft until the cable drum seats against the TorqueMaster® spring tube assembly.

The winding shaft must extend past the cable drum far enough to expose the splines and the groove.

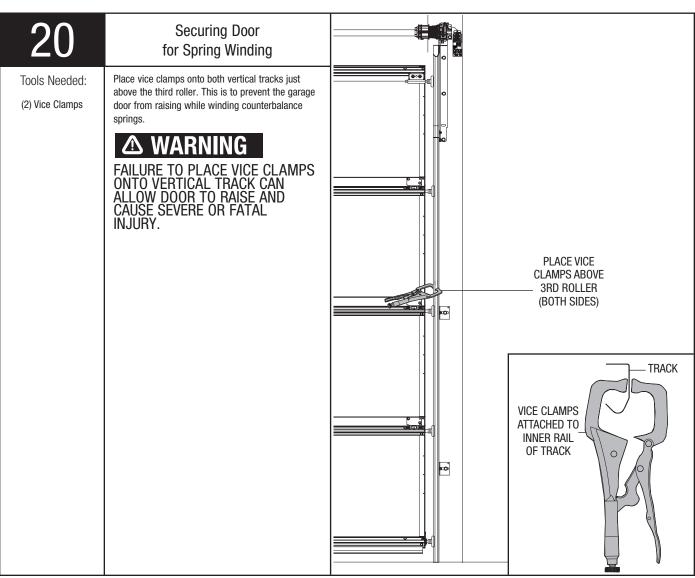
Align the winding shaft groove with the round notch in the flagangle.



Groove Cable Drums Continued... Splines Cam Peak Straight Up Winding Shaft Tools Needed: For double spring applications: Repeat for the left hand side. Cable For single spring applications: Pre-wrap the left Round Notch Drum hand cable drum with the counterbalance cable 1-1/2 wraps and insert the loose winding shaft Flagangle into the cable drum prior to sliding the cable drum over the TorqueMaster® spring tube assembly. NOTE: On single spring applications, take care in handling the loose winding shaft (left side) so that it does not slide back into the TorqueMaster® spring tube assembly. Cam Peak Counterbalance Cable Straight Up Winding Shaft Cable Drum Splines LOOSE WINDING SHAFT



CENTER BRACKET Securing Center Bracket Assembly **BUSHING ASSEMBLY NOTE**: If you are not installing the idrive[®] opener on Tools Needed: your garage door, you must install the center bracket Power Drill bushing assembly, follow these instructions. **IMPORTANT: TORQUEMASTER® SPRING** 3/16" Drill Bit TUBE ASSEMBLY MUST BE LEVEL BEFORE CENTER BRACKET ASSEMBLY IS FAS-7/16" Socket Driver TENED TO HEADER. Step Ladder To locate the center bracket, mark the header halfway between the flagangles and level the TorqueMaster® spring tube assembly. Drill 3/16" pilot holes into header for the lag screws. Fasten the metal bracket to the header using (2) 5/16" X 1-5/8" lag screws. (2) 5/16" X 1-5/8" HEX HEAD LAG **SCREWS**



Tools Needed:

Vice Grips

Pliers/Wire Cutters

Flat Tip Screwdriver

Step Ladder

Cable Adjustment

Starting on the right side, adjust the cable drum assembly by rotating the drum until the set screw faces directly away from the header. Torque tube cam peak should be pointing straight up.

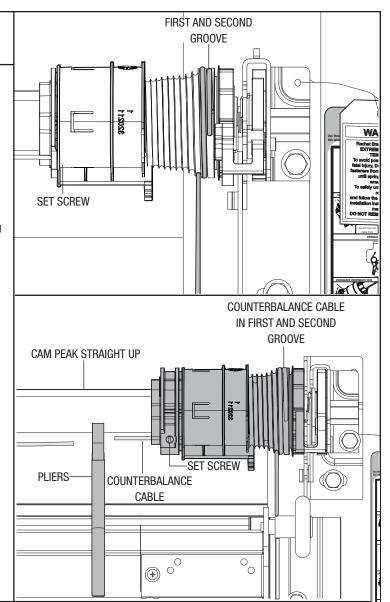
Loosen the set screw no more than 1/2 turn. Ensure counterbalance cable is aligned and seated in the first and second grooves and pull on the end of the counterbalance cable to remove all cable slack.

Snug the set screw, and then tighten an additional 1-1/2 turns. Measure approximately 6" of cable and cut off excess cable. Insert end of cable in hole of cable drum.

Repeat for left hand cable drum assembly.

IMPORTANT: ENSURE THE CABLE IS ALIGNED AND SEATED IN THE FIRST AND SECOND GROOVES OF THE CABLE DRUM PRIOR TO WINDING SPRINGS.

NOTE: This illustration shows the right hand TorqueMaster® Plus cable drum assembly, left hand cable drum assembly is symmetrically opposite.



22

Tools Needed:

Ratchet Wrench

5/8" Socket

3" Extension

Gloves

Step Ladder

Winding Springs

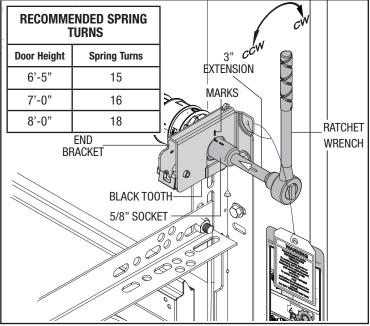
△ WARNING

IT IS RECOMMENDED THAT LEATHER GLOVES BE WORN WHILE WINDING THE TORQUEMASTER® PLUS SPRINGS. FAILURE TO WEAR GLOVES MAY CAUSE INJURY TO HANDS.

Double check to ensure the counterbalance cable is aligned in the first and second groove of the cable drum (see Step 21).

There are two methods for counting the spring turns as you wind. One method is to identify the black tooth on the ratchet wheel inside of the end bracket. When the wheel makes one revolution and the tooth returns to its starting point, one turn has been made. The other method is to make a mark on the winding shaft (or socket) and end bracket, and count your turns in this manner.

Starting on the right hand side. Turn the pawl knob on the end bracket to the upper position. Using a ratchet wrench with a $5/8^\circ$ 16mm socket (**NOTE**: A 3" 76 mm



Winding Springs Continued...

Tools Needed:

extension is also recommended for added clearance from the horizontal angle.), wind the spring by rotating the winding shaft <u>counter clockwise</u>, while watching either the black tooth on the ratchet wheel or the mark on the winding shaft.

IMPORTANT: PAWL KNOB MUST BE IN UPPER POSITION TO ADD/ REMOVE REQUIRED NUMBER OF SPRING TURNS.

After 2-3 turns, remove the ratchet wrench and adjust the cable on the left side. Ensure the cables are in the first and second groove of the cable drums, as shown in Step 21

NOTE: Single spring application require no spring winding on the left hand side, but cable tension needs to be adjusted.

IMPORTANT: COUNTERBALANCE CABLE TENSION MUST BE EQUAL ON BOTH SIDES PRIOR TO FULLY WINDING SPRINGS.

SEE THE SPRING TURN CHART FOR THE REQUIRED NUMBER OF TURNS:

For single spring applications: Return to the right hand and continue winding the spring to the required number of turns for your door. Place pawl knob in lower position.

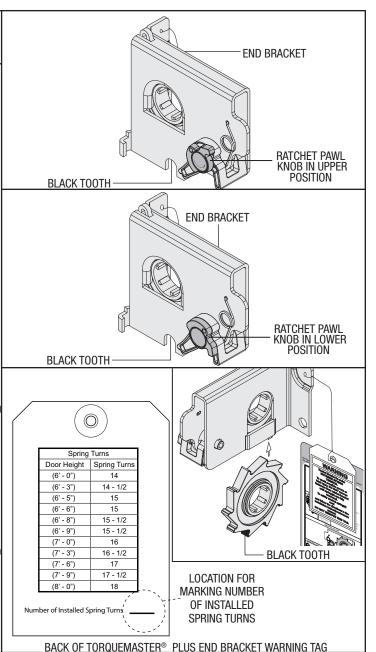
For double spring applications: Either use the black tooth on the ratchet wheel for winding reference or place a mark on the winding shaft and end bracket. Place the ratchet with 5/8" socket onto the left hand winding shaft end. To wind the spring, rotate the winding shaft clockwise, while watching the black tooth on the ratchet wheel or the mark on the winding shaft.

Rotate the winding shaft to the required number of turns for your door. Then return to the right hand side and wind the right hand spring to the required number of turns. Place pawl knob in lower position on both sides.

IMPORTANT: Mark number of spring turns on TorqueMaster® Plus end bracket warning tag.

NOTE: Since total turns to balance door can deviate from SPRING TURN CHART values by \pm 1/2 turn, adjustments to the recommended number of turns may be required AFTER rear hangers assembly is completed.

IMPORTANT! HOLD THE DOOR DOWN TO PREVENT IT FROM RISING UNEXPECTEDLY IN THE EVENT THE SPRING WAS OVERWOUND AND CAUTIOUSLY REMOVE VICE CLAMPS FROM VERTICAL TRACKS.



23

Tools Needed:

Drum Wrap Installation

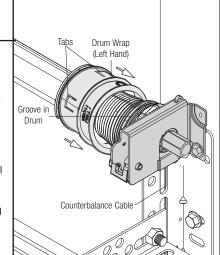
Un-snap the drum wrap hinged latch and rotate down.

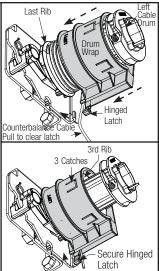
IMPORTANT: PULL THE COUNTERBAL-ANCE CABLE AWAY FROM THE HEADER TO CLEAR THE LATCH. SIMULTANEOUSLY SLIDE THE DRUM WRAP AGAINST THE LAST RIB OF THE DRUM UNTIL THE 3 TABS ENGAGE THE THIRD RIB

Re-engage the hinged latch by rotating upward until a distinct snap is felt.

Confirm the catch is fully engaged by lightly tugging on it.

Repeat for the left hand side.





Tools Needed:

Ratchet Wrench

1/2" Socket

1/2" Wrench

(2) Vice Clamps

Level

Hammer

Tape Measure

Step Ladder

Rear Support

Raise the door until the top section and half of the next section are in a horizontal position. Do not raise door any further since the horizontal track are not yet supported at the rear.

△ WARNING

RAISING DOOR FURTHER CAN RESULT IN DOOR FALLING AND CAUSE SEVERE INJURY OR DEATH.

Clamp a pair of vice clamps on the vertical tracks just above the second roller on one side, just below the second roller on the other side. This will prevent the door from raising or lowering while installing the rear support. Using perforated angle, 5/16" x 1-5/8" hex head lag screws and 5/16" bolts with nuts (may not be supplied), fabricate rear support for horizontal tracks. Attach horizontal tracks to the rear supports with 5/16"-18 x 1-1/4" hex bolts and nuts (may not be supplied). Horizontal tracks must be level and parallel to door within 3/4" to 7/8" maximum of door edge.

NOTE: If an idrive® opener is installed, position horizontal tracks one hole above level when securting it to the rear.

⚠ WARNING

KEEP HORIZONTAL TRACK PARALLEL AND WITHIN 3/4" TO 7/8" MAXIMUM OF DOOR EDGE, OTHERWISE DOOR COULD FALL, RESULTING IN SEVERE INJURY OR DEATH.

IMPORTANT: DO NOT SUPPORT THE WEIGHT OF THE DOOR ON ANY PART OF THE HORIZONTAL TRACK HANGER THAT CANTILEVERS 4" OR MORE BEYOND A SOUND FRAMING MEMBER.

NOTE: If rear supports are to be installed over drywall, use 5/16" x 2" hex head lag screws, and make sure lag screws engaged solid structural lumber.

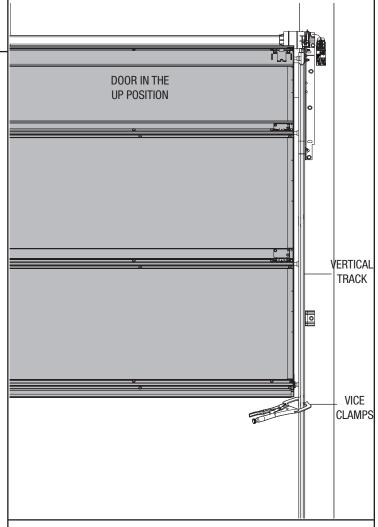
NOTE: 26" angle must be attached to sound framing members and nails should not be used.

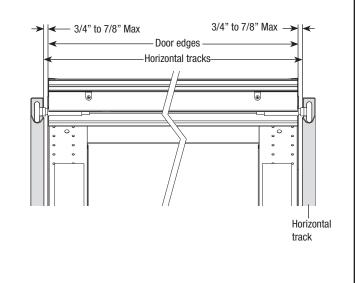
Now, permanently attach the weather seal to both door jambs and header. (Temporarily attached in PREPARING THE OPENING on page 6).

Avoid pushing weather seal stop too tightly against face of door.

Now, lift door and check it's balance. Adjust, if door lifts by itself (hard to pull down) or if door is difficult to lift (easy to pull down). Anytime spring adjustments are made, ratchet pawl knob must be in the upper position to add/remove required number of spring turns. To adjust springs, only add or remove a maximum of 3/10 of a turn (three teeth of ratchet wheel) at a time. Both sides need to be adjusted equal on double spring doors.

Add Spring Tension: The ratchet wheel is made of 10 teeth. To add spring tension, ensure the ratchet and socket is set so that it will tighten counter clockwise on the right hand side, and clockwise on the left hand side. Place the ratchet with 5/8" socket





Rear Support Continued...

Tools Needed:

onto the winding shaft, pull down to add 3/10 of a turn. Watch as three teeth of the ratchet wheel pass over the pawl, creating three "clicks".

Remove Spring Tension: To remove spring tension, ensure the ratchet and socket is set so that it will tighten counter clockwise on the right hand side and clockwise on the left hand side. It is recommended that a regular 5/8" wrench be used. Place the wrench onto the winding shaft. Pull down on the wrench to relieve pressure between the pawl and the ratchet wheel. Push in on the pawl to allow the three ratchet wheel teeth to pass by the pawl, as you carefully allow the wrench to be rotated upward by the spring tension. Release the pawl to allow it to engage with the ratchet wheel.

IMPORTANT: BE PREPARED TO HOLD THE FULL TENSION OF THE SPRING.

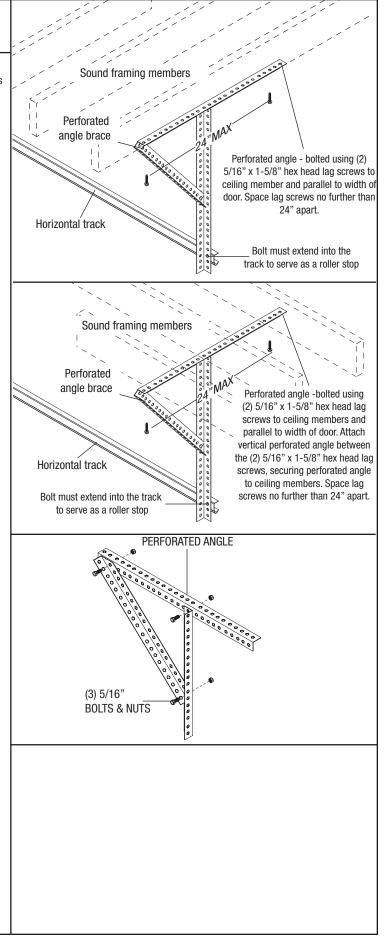
IMPORTANT: DO NOT ADD OR REMOVE MORE THAN 1 SPRING TURNS (1 SPRING TURN EQUALS 10 TEETH ON RATCHET WHEEL) FROM THE RECOMMENDED NUMBER OF TURNS SHOWN ON THE SPRING TURN CHART.

If the door still does not operate easily, lower the door into the closed position, UNWIND SPRING (S) COMPLETELY, and recheck the following items:

- 1.) Check the door for level.
- 2.) Check the TorqueMaster® spring tube and flagangles for level and plumb.
- 3.) Check the distance between the flaganglesmust be door width plus 3-3/8" to 3-1/2".
- 4.) Check the counterbalance cables for equal tension adjust if necessary.
- 5.) Rewind the spring(s).
- 6.) Make sure door isn't rubbing on jambs.

NOTE: If an idrive opener was installed and you have completed your rear support installation, refer to the idrive Installation Instructions and Owner's Manual to complete your idrive installation.

NOTE: Windows will cause the top section to be significantly heavier than the remaining sections. Wayne-Dalton attempts to balance the door at the top & bottom. To prevent any sudden door acceleration between the top & bottom, we recommend motor operating all glazed top doors. Doors with windows in top sections should not be manually operated.



Tools Needed:

5/8" Socket

Ratchet Wrench

3" Extension

Vice Clamps (Pair)

3" Extension

Step Ladder

TorqueMaster® Plus Reset Instructions

IMPORTANT! THE OPENER FORCE SET-TINGS MUST BE ADJUSTED ACCORDING TO THE MANUFACTURER'S INSTRUC-TIONS. SOME LIGHTER WEIGHT DOORS ARE DESIGNED TO OPERATE WITH A SINGLE COUNTER-BALANCE SPRING. IF THAT COUNTER-BALANCE SPRING BREAKS AND THE OPENER'S FORCE SET-TINGS ARE NOT ADJUSTED ACCORDING TO THE MANUFACTURER'S SPECIFICA-TIONS, THE OPENER MAY THEN HAVE THE CAPABILITY OF LIFTING THE DOOR TO THE OPEN POSITION, DESPITE THE BROKEN COUNTER-BALANCE SPRING. THIS SCE-NARIO WILL CAUSE THE COUNTER-BAL-ANCE CABLES TO GO SLACK AND ENGAGE THE TORQUEMASTER® PLUS SAFETY SYSTEM. IF A PERSON IS UNAWARE OF THE SLACK CABLES AND THE ENGAGED TORQUEMASTER® PLUS SAFETY SYSTEM AND ACTIVATES THE MIS-ADJUSTED OPENER, DAMAGE WILL LIKELY OCCUR TO THE DOOR AND OPENER. THE POTENTIAL ALSO EXISTS THAT THE PERSON ACTIVAT-ING THE OPENER UNDER THIS SCENARIO COULD BE SEVERELY INJURED.

△ WARNING

READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO RESET THE TORQUEMASTER® PLUS SYSTEM. IF IN QUESTION ABOUT ANY OF THE PROCEDURES, DO NOT PERFORM THE WORK. INSTEAD, HAVE A TRAINED DOOR SYSTEMS TECHNICIAN RESET THE SYSTEM.

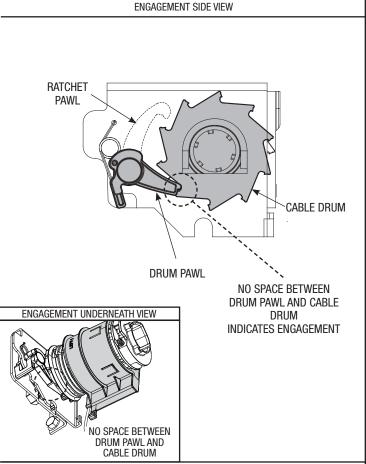
△ WARNING

TO AVOID SEVERE OR FATAL INJURY, DO NOT STAND OR WALK UNDER A MOVING DOOR, OR PERMIT ANYONE TO STAND OR WALK UNDER AN ELECTRICALLY OPERATED DOOR.

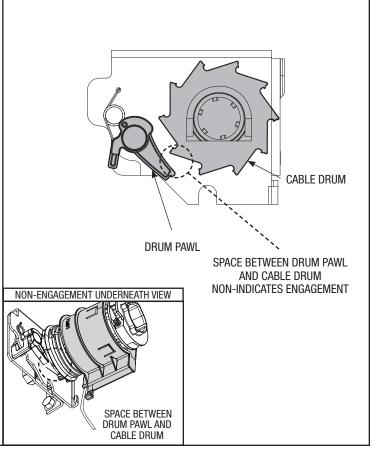
This door is equipped with a TorqueMaster® Plus system, a safety feature which prevents the door from rapidly descending in case of spring failure or forceful manual operation. If the system engages with the door in the open position, personal items that are left unattended in the garage or home are at risk to theft. To insure the safekeeping of these items, close the garage door.

Typical signs of an engaged system:

Single spring system: Visually inspect the Torque-Master® Plus right hand end bracket to confirm that the system has engaged (see illustration). If the system is engaged then the door will not close. If the opener force settings were properly set during the initial installation, the door will not open.



NON-ENGAGEMENT SIDE VIEW



TorqueMaster® Plus Reset Instructions Continued...

Tools Needed:

If the opener can physically overcome the weight of the door and lift it to the open position, then the counterbalance cables will be slack. If the system is engaged, DO NOT attempt to make the repairs. Instead, have a trained door system technician make the necessary repairs to cables, spring assemblies and other hardware.

Double spring system: Visually inspect the TorqueMaster® Plus end brackets to confirm that the system has engaged (see illustration). Door will open, but will not close. Door makes a distinct "clicking" noise upon being opened. If the system is engaged, carefully follow the reset instructions below or refer to the reset tag (attached to right hand end bracket) to reset the TorqueMaster® Plus system

RESETTING AN ENGAGED TORQUEMASTER® PLUS DOUBLE SPRING SYSTEMS ONLY:

- 1. First, locate and visually inspect the TorqueMaster® Plus end brackets to confirm that the system is engaged (see illustration).
- 2. Disengage the opener (if installed) by pulling or placing the emergency disconnect in the manual operated position.
- 3. With assistance, raise the door to the fully open position.
- 4. Place vice clamps onto both vertical tracks just below the bottom roller on both sides.
- Now is a good time to remove vehicles or personal items from garage to provide clear access to end brackets.
- 6. Flip the ratchet pawl knob on both end brackets to the upper position (see illustration).
- 7. Raise door 2"-3" and then lower door. Repeat this process until the system resets (see disengaged system illustrations).

IMPORTANT: BE PREPARED TO SUPPORT THE TOTAL WEIGHT OF THE DOOR.

8. Cautiously remove the vice clamps from the vertical tracks. With assistance, lower door. **CHECKING SPRINGS FOR TENSION:**

9. Starting on the right hand side, place a ratchet wrench with 5/8" socket on the TorqueMaster® Plus winding shaft (see illustration). Ensure ratchet is set so that it will tighten counter clockwise on the right hand side, and clockwise on the left hand side. If tension is present, remove the ratchet and check the left hand side. If springs have tension, proceed to the paragraph titled BALANCING DOOR; if no spring tension is present, contact a qualified door systems technician to replace the spring(s).

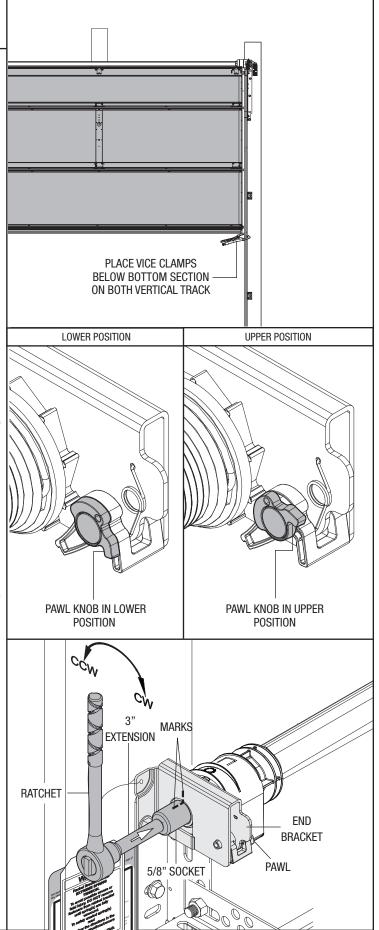
technician to replace the spring(s). IMPORTANT! TO AVOID POSSIBLE INJURY, HAVE A TRAINED DOOR SYSTEM TECHNICIAN MAKE ADJUSTMENTS/ REPAIRS TO CABLES, SPRING ASSEMBLIES AND OTHER HARDWARE.

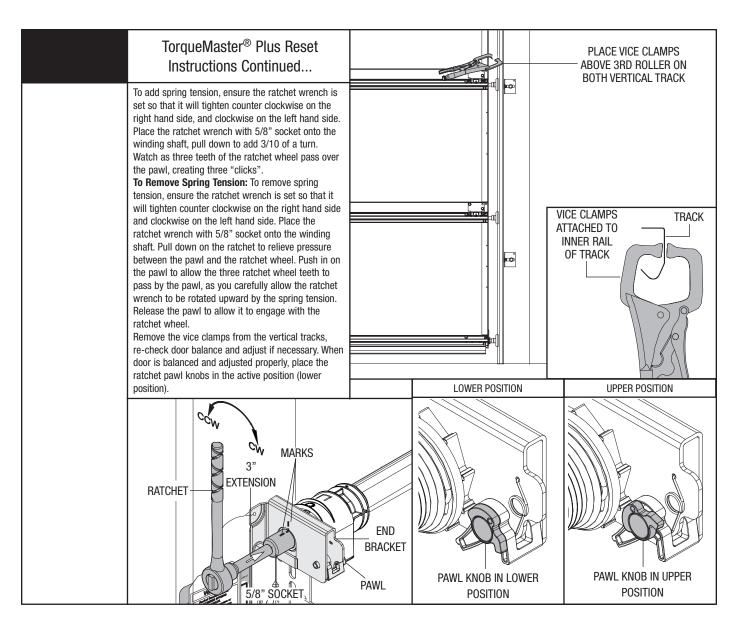
Lift the door and check its balance. Adjust springs, if door lifts by itself (hard to pull down) or if door is difficult to lift (easy to pull down). Anytime spring adjustments are made, ratchet pawl knob must be in the upper position (see illustration). An unbalanced door can cause idrive® or Torquemaster® Plus operation problems.

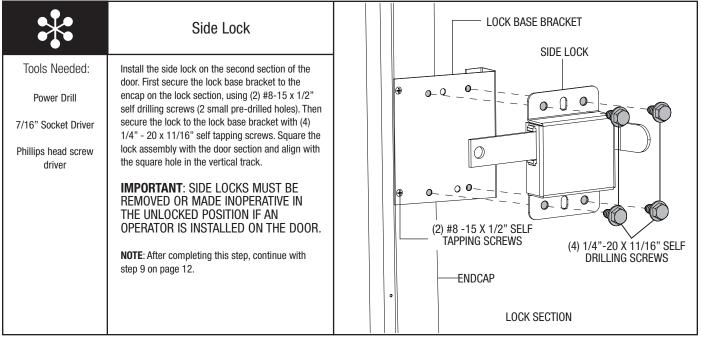
IMPORTANT! TO ADJUST SPRINGS, ONLY ADD OR REMOVE A MAXIMUM OF 3/10 OF A TURN (THREE TEETH ON THE RATCHET WHEEL) AT A TIME. BOTH SIDES NEED TO BE ADJUSTED EQUALLY ON DOUBLE SPRING DOORS.

Close the door and place vice clamps onto both vertical tracks just above the third roller. This is to prevent the garage door from raising while adjusting the counterbalance spring(s).

To Add Spring Tension: The ratchet wheel is made of 10 teeth.









Tools Needed:

Power Drill

1/8" Drill Bit

Tape Measure

Pull Rope

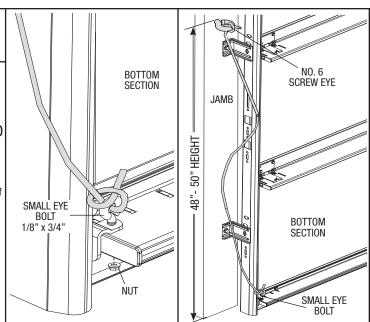
⚠ WARNING

DO NOT INSTALL PULL ROPES ON DOORS WITH ELECTRIC OPERATORS. CHILDREN MAY BECOME ENTANGLED IN THE ROPE CAUSING SEVERE OR FATAL INJURY.

Measure and mark the jamb approximately 48" to 50" (1220 to 1270 mm) from floor on the right or left side of jamb. Drill 1/8" pilot hole and install No. 6 screw eye.

Locate the roller carrier at the bottom of the door; remove the self tapping screw. Using the roller carrier as a guide, drill a 1/8" diameter hole through the u-bar. Insert the 1/8" x 3/4" eye bolt and secure to the u-bar with one nut. Tie pull rope to the eye bolt.

Tie pull rope to No. 6 screw eye , installed on jamb as shown.





Trolley Operator

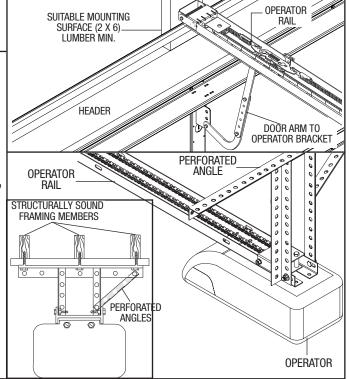
Tools Needed:

WARNING

OPERATOR MUST BE TESTED AT TIME OF INSTALLATION AND MONTHLY THEREAFTER AS DESCRIBED IN YOUR INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL, TO ENSURE THAT DOOR SAFETY FEATURES FUNCTION. FAILURE TO TEST OR MAKE ANY NECESSARY ADJUSTMENTS OR REPAIRS, CAN RESULT IN SEVERE OR FATAL INJURY.

- 1. Install operator rail 1/2" to 1-1/2" (13 38 mm) above high arc of top section of the door.
- Attach operator bracket to a suitable mounting surface (2" x 6") lumber minimum.
- Mount operator to ceiling so that 1" to 1-1/2" (25 38 mm) clearance is maintained between trolley rail and top section when door is fully open (trolley rail will slope down towards rear).
- Attach operator to structurally sound ceiling framing members.
- 5. Attach door arm to operator bracket.

IMPORTANT: ANGLE MUST BE ATTACHED TO FRAMING MEMBER(S).



Cleaning

Like any other exterior surface, Wayne-Dalton garage doors will have dirt exposure from atmospheric conditions. Ordinarily, the cleaning action of rainfall will be adequate to wash the door, or the door can be washed periodically by hosing with a garden hose and clear water (in particular) for the areas not accessible to rain. If you desire to do a more thorough cleaning, or where soil collection conditions occur, follow these simple instructions.

- Use a soft-bristled, long-handled washing brush. It attaches to your garden hose and makes washing your garage door easier. Do not rub vigorously which may create
 glossy areas over the vinyl finish.
- 2. For hard-to-remove dirt, such as soot and grime found in industrial areas, wash the garage door down with a mild solution consisting of the following ingredients:

 One cup detergent (with less than 0.5% phosphate) dissolved into five gallons of warm water.

NOTE: The use of detergents containing greater than 0.5% phosphate is not recommended for use in general cleaning of garage doors.

NOTE: Be sure to clean behind weather stripping on both sides and top of door.

3. Start at the bottom and work up to the top, as less streaking will result. Immediately following all washing operations, thoroughly rinse the surface area with fresh water from a garden hose.

This cleaning and maintenance information is suggested in an effort to be of assistance; however, manufacturer cannot assume responsibility for results obtained which are dependent on the cleaning solution and method of application.

CAUTION: DO NOT PAINT DOOR. PAINTING DOOR WILL VOID YOUR WARRANTY.

Limited Warranty Model 9300

Subject to the terms and conditions contained in this Limited Warranty, Wayne-Dalton Corp. ("Manufacturer") warrants the sections of the door, which is described at the top of this page, for a period of <u>TEN (10) YEARS</u> from the date of installation against:

- (i) Warping, blistering, peeling, flaking, chipping or cracking due to defects in material or workmanship. However, if this product is installed in a geographic location where the use of vinyl building materials is not recommended due to their potential failure, resulting from exposure to extremely high ambient temperature and ultra-violet ray levels, then this product is not covered under this Limited Warranty.
- (ii) Fading, other than as may result from normal weathering. For purposes of this Limited Warranty, "fading" is defined as a loss of color, that after cleaning with the recommended solution, deviates more than four (4) color standard units from the original color, ε measured by a recognized industry-approved spectrophotometer.

The Manufacturer warrants the garage door hardware (except springs) and the tracks of the above-described door, for a period of <u>TEN (10)</u> <u>YEARS</u> from the date of installation, against defects in material and workmanship, subject to all the terms and conditions below.

The Manufacturer warrants those component parts of the door not covered by the preceding provisions of this Limited Warranty against defec in material and workmanship for a period of **ONE (1) YEAR** from the date of installation.

This Limited Warranty is extended only to the person who purchased the product and continues to own the premises (where the door is installed) as his/her primary residence ("Buyer"). This Limited Warranty does not apply to residences other than primary, or to commercial or industrial installations, or to installations on rental property (even when used by a tenant as a residence). This Limited Warranty is not transferable to any other person (even when the premises is sold), nor does it extend benefits to any other person. As a result this Limited Warranty does NOT apply to any person who purchases the product from someone other than an authorized Wayne-Dalton dealer or distributor.

The Manufacturer will not be responsible for any damage attributable to improper storage, improper installation, or any alteration of the door its components, abuse, damage from corrosive fumes or substances, salt spray or saltwater air, fire, Acts of God, failure to properly maintain the door, or attempt to use the door, its components or related products for other than its intended purpose and its customary usage. This Limited Warranty does not cover ordinary wear. The Limited Warranty for the sections of the door will be voided if painted. This Limited Warranty will be voided if any holes are drilled into the door, other than those specified by the Manufacturer.

THIS LIMITED WARRANTY COVERS A CONSUMER PRODUCT AS DEFINED BY THE MAGNUSON-MOSS ACT. NO WARRANTIES, EXPRESS OR IMPLIED (INCLUDING BUT NOT LIMITED TO THE WARRANTY OF MERCHANTABILITY OR FITNESS FOF A PARTICULAR PURPOSE) WILL EXTEND BEYOND THE TIME PERIOD SET FORTH IN **UNDERSCORED BOLD FACE TYPE** IN THIS LIMITED WARRANTY, ABOVE.

 Some States do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

Any claim under this Limited Warranty must be made in writing, within the applicable warranty period, to the dealer from which the product was purchased. Unless the dealer is no longer in business, a written claim to the Manufacturer will be the same as if no claim had been made at all.

At the Manufacturer's option, pursuant to the dealer having notified the Manufacturer of a warranty claim, a service representative may inspect the product on site, or Buyer may be required to return the product to the Manufacturer at Buyer's expense. Buyer agrees to cooperate with any representative of the Manufacturer and to give such representative full access to the product with the claimed defect and full access to the location of its installation.

If the Manufacturer determines that the claim is valid under the terms of this Limited Warranty, the Manufacturer will cause the defective product to be repaired or replaced. The decision about the manner in which the defect will be remedied will be at the discretion of the Manufacturer, subject to applicable law. THE REMEDY WILL COVER ONLY MATERIAL. THIS LIMITED WARRANTY DOES NOT COVER OTHER CHARGES, SUCH AS FIELD SERVICE LABOR FOR REMOVAL, INSTALLATION, PAINTING, SHIPPING, ETC.

Any repairs or replacements arranged by Manufacturer will be covered by (and subject to) the terms, conditions, limitations and exceptions of this Limited Warranty; *provided, however*, that the installation date for the repaired or replaced product will be deemed to be the date the original produc was installed, and this Limited Warranty will expire at the same time as if there had been no defect. If a claim under this Limited Warranty is resolved in manner other than described in the immediately preceding paragraph, then neither this Limited Warranty nor any other warranty from the Manufacturer will cover the repaired or replaced portion of the product.

THE REMEDIES FOR THE BUYER DESCRIBED IN THIS LIMITED WARRANTY ARE EXCLUSIVE and take the place of any other remedy. The liability of the Manufacturer, whether in contract or tort, under warranty, product liability, or otherwise, will not go beyond the Manufacturer's obligation to repair or replace, at its option, as described above. THE MANUFACTURER WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, including (but not limited to) damage or loss of other property or equipment, personal injury, loss of profits or revenues, business or service interruptions, cost of capital, cost of purchase or replacemen of other goods, or claims of third parties for any of the foregoing.

• Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

No employee, distributor, dealer, representative, or other person has the authority to modify any term or condition contained in this Limited Warranty or to grant any other warranty on behalf of or binding on the Manufacturer, and anyone's attempt to do so will be null and void.

Buyer should be prepared to verify the date of installation to the satisfaction of the Manufacturer.

The rights and obligations of the Manufacturer and Buyer under this Limited Warranty will be governed by the laws of the State of Ohio, US/ to the extent permitted by law.

 This Limited Warranty gives you specific legal rights and you may also have other rights, which may vary from State to State.

Covered by one or more of the following Patents 5,259,143; 5,408,724; 5,409,051; 5,419,010; 5,495,640; 5,522,446; 5,562,141; 5,566,740; 5,568,672; 5,718,533; 5,720,142; 5,836,499; 5,914,078; 6,019,269; 6,089,304; 6,442,897 Other US and Foreign Patents pending.
Please Do Not Return This Product To The Store Contact your local Wayne-Dalton dealer. To find your local Wayne-Dalton dealer, refer to your local yellow pages business listings or go to the Find a Dealer section online at www.wayne-dalton.com
Thank you for your purchase.